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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,463	09/11/2003	Esa Maatta	915-006.023	4945

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EXAMINER
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LEE, JINHEE J

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/660,463

Applicant(s)

MAATTA ET AL.

Examiner

Jinhee J. Lee

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0903</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electric components of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Abstract has legal phraseology such as "comprises".

***Claim Objections***

4. Claims 4, 7, 14 and 17 are objected to because of the following informalities:

Claim 4 line 1 and claim 14 line 1, the phrase "said bending" has an error.

Examiner suggests, "bending" instead to avoid insufficient antecedent rejection.

Claim 7 line 1 and claim 17 line 1, the phrase "said brackets" has an error.

Examiner suggests "brackets" instead to avoid insufficient antecedent rejection.

Claim 2 line 3, the phrase "the locking projections" has

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Helot et al. (US006437973B1).

Re claim 1, Helot et al. discloses a hinge mechanism, for a folding casing of an electric device consisting of at least two casing parts, each of said casing parts

including electric components, comprising: at least a hinge body component (42, 52 the back or outer sides for example); and flexible electrical conductor means (168 for example) for connecting said electric components included by different casing parts (22, 28 for example); wherein said hinge body component provides two pivot axes, which are separated at a predefined distance; and said hinge body component provides a passage for accepting said flexible electrical conductor means (see figure 1).

Re claim 2, Helot et al. discloses a hinge mechanism, wherein a total pivot angle results from summation of individual pivot angles about each of which said respective pivot axis is pivoted (see figure 1).

Re claim 3, Helot et al. discloses a hinge mechanism, wherein each pivot axis is pivoted independently (see figure 1).

Re claim 4, Helot et al. discloses a hinge mechanism, wherein said bending of said flexible electrical conductor means is obtained in a plane substantially perpendicular to said pivot axes (see figure 1).

Re claim 5, Helot et al. discloses a hinge mechanism, further comprising: - inner hinge cover component (42, 52 the inner or front sides for example); wherein said inner hinge cover component is designed to fit into said hinge body component such that said hinge body component in conjunction with said inner hinge cover component forms said passage and said flexible electrical conductor means is enclosed by said hinge body component and said inner hinge cover component (see figures 1 and 2).

Re claim 6, Helot et al. discloses a hinge mechanism, further comprising: a set of brackets (130, 132, 140, 142 connectors for example); wherein said brackets are

Art Unit: 2831

provided for being mounted to said at least two casing parts; wherein said brackets engage in said hinge body component such that said two pivot axes are established thereby (see figures 1 and 2).

Re claim 7, Helot et al. discloses a hinge mechanism, wherein said brackets (190 for example) have journal members (43, 49 for example) which interact with journal acceptance members provided in the hinge body component to establish said pivot axes (see figure 4).

Re claim 8, Helot et al. discloses a hinge mechanism, wherein said flexible electrical conductor means are freely movable within said hinge mechanism to allow compensation of shortening and extension of said flexible electrical conductor means caused by bending thereof due to pivoting (see figure 2 and column 3 line 50 according to the numbering in the middle).

Re claim 9, Helot et al. discloses a hinge mechanism, wherein said flexible electrical conductor means are routed substantially tangential to end portions of said hinge body component in a close position of said folding casing (see figures 1 and 2).

Re claim 10, Helot et al. discloses a hinge mechanism, wherein said flexible electrical conductor means are routed substantially at bending angles against end portions of said hinge body component in an open position of said folding casing; wherein said bending angles correspond to said individual pivot angles (see figures 1 and 2).

Re claim 11, Helot et al. discloses an electric device with a folding casing being constituted by at least two casing parts, which are joined by a hinge mechanism

Art Unit: 2831

comprising: at least a hinge body component (42, 52 the back or outer side for example); and flexible electrical conductor means (168 for example) for connecting said electric components included by different casing parts; wherein said hinge body component provides two pivot axes, which are separated at a predefined distance; and said hinge body component provides a passage for accepting said flexible electrical conductor means (see figures 1 and 2).

Re claim 12, Helot et al. discloses an electric device, wherein a total pivot angle results from summation of individual pivot angles, about which each respective pivot axis is pivoted (see figure 1).

Re claim 13, Helot et al. discloses an electric device, wherein each pivot axis is pivoted independently (see figure 1).

Re claim 14, Helot et al. discloses an electric device, wherein said bending of said flexible electrical conductor means is obtained in a plane substantially perpendicular to said pivot axes (see figure 1).

Re claim 15, Helot et al. discloses an electric device, further comprising: an inner hinge cover component (42, 52 inner or front side for example); wherein said inner hinge cover component is desired to fit into said hinge body component such that said hinge body component in conjunction with said inner hinge cover component form said passage and said flexible electrical conductor means is enclosed by said hinge body component and said inner hinge cover component (see figures 1 and 2).

Re claim 16, Helot et al. discloses an electric device, further comprising: a set of brackets (130, 132, 140, 142 for example); wherein said brackets are provided for

Art Unit: 2831

being mounted to said at least two casing parts; wherein said brackets engage in said hinge body component such that said two pivot axes are established thereby (see figures 1 and 2).

Re claim 17, Helot et al. discloses an electric device, wherein said brackets (190 for example) have journal members (43 and 49 for example) which interact with journal acceptance members provided in the hinge body component to establish said pivot axes (see figure 4).

Re claim 18, Helot et al. discloses an electric device, wherein said flexible electrical conductor means are freely movable within said hinge mechanism to allow for compensation of shortening and extension of said flexible electrical conductor means caused by bending thereof due to pivoting (see figure 2 and column 3 line 50).

Re claim 19, Helot et al. discloses an electric device, wherein said flexible electrical conductor means are routed substantially tangential to end portions of said hinge body component in a close position of said folding casing (see figures 1 and 2).

Re claim 20, Helot et al. discloses an electric device, wherein said flexible electrical conductor means are routed substantially at bending angles against end portions of said hinge body component in an open position of said folding casing; wherein said bending angles correspond to said individual pivot angles (see figures 1 and 2).

Re claim 21, Helot et al. discloses an electric device that is a portable electric terminal (see figure 1).



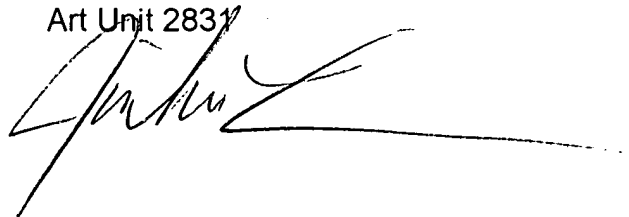
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J Lee whose telephone number is 571-272-1977. The examiner can normally be reached on M, T, Th and F at 6:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jinhee J Lee  
Patent Examiner  
Art Unit 2831

A handwritten signature in black ink, appearing to read 'Jinhee J Lee', is written over the printed name and title.

jjl